**Abstract**

Method and Device for Testing a Structural Component Having a Complex Surface Contour by Means of Ultrasound

The invention relates to a method and a device for testing a structural component having a complex surface contour by means of ultrasound, at least one ultrasonic head (UPK) being guided along the surface contour (OK) of the structural component (BT) by means of a manipulator (MM) having several axial drives (MX, MJ, MZ, MA, MB) in several axes at a defined spacing (A) along the surface contour (OK) of the structural component (BT). To also ensure a high measuring accuracy in structural components which have a complex curved surface contour, it is provided that the axial drives (MX, MJ, MZ, MA, MB) of the manipulator (MM) are synchronously moved along predetermined support points, that a trigger drive (MRT) is controlled in synchronism with the axial drives (MX, MJ, MZ, MA, MB) and moved together with all engaged axial drives according to a predetermined surface line (OL) reproducing the surface contour (OK) and that the trigger drive (MRT) generates equidistant trigger pulses relative to the surface line (OL) of the complex surface contour.

Fig. 3